

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

United States Patent and Trademark
Office
(Box PCT)
Crystal Plaza 2
Washington, DC 20231
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 23 June 1998 (23.06.98)	
International application No. PCT/US96/17519	Applicant's or agent's file reference JA171F/JH
International filing date (day/month/year) 04 November 1996 (04.11.96)	Priority date (day/month/year)
Applicant NAMBU, Takanori	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:
28 May 1998 (28.05.98)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

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1211 Geneva 20, Switzerland

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Authorized officer

F. Zotomayor

Telephone No.: (41-22) 338.83.38

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INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference JA171F/JH	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 96/ 17519	International filing date(<i>day/month/year</i>) 04/11/1996	(Earliest) Priority Date (<i>day/month/year</i>)
Applicant THE PROCTER & GAMBLE COMPANY et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☐ Certain claims were found unsearchable (see Box I).

2. ☐ Unity of invention is lacking (see Box II).

3. ☐ The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing

☐ filed with the international application.

☐ furnished by the applicant separately from the international application,

☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.

☐ Transcribed by this Authority

4. With regard to the title, ☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this International Search Report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is:

Figure No. _____ ☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☒ None of the figures.

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 A61K7/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 685 219 A (WELLA) 6 December 1995 see claims 1,10,11 see page 6, line 28-31 ---	1-3
X	GB 2 123 694 A (L'OREAL) 8 February 1984 see claims 1,8,17 see page 9, line 9-12 ---	1-3
X	EP 0 470 381 A (KAO) 12 February 1992 see claims 1,2 see page 11, line 4-6 see page 11, line 50-51 see page 12, line 2-6 ---	1-3
X	GB 2 134 784 A (L'OREAL) 22 August 1984 see claims 1,10,22 see page 7, line 45-54 ---	1,3
	--- -/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

30 July 1997

Date of mailing of the international search report

0 8. 08. 97

Name and mailing address of the ISA

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Fax (+ 31-70) 340-3016

Authorized officer

Peeters, J

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2 136 689 A (L'OREAL) 26 September 1984 see claims 1,3,11,14,16 -----	1,2

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 96/17519

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 685219 A	06-12-95	DE 4419457 A BR 9502645 A ES 2082735 T JP 7330557 A US 5609168 A	07-12-95 05-03-96 01-04-96 19-12-95 11-03-97
GB 2123694 A	08-02-84	LU 84286 A BE 897335 A CA 1203752 A CH 657986 A DE 3326342 A FR 2530465 A JP 59033208 A NL 8302577 A US 4638822 A	22-03-84 20-01-84 29-04-86 15-10-86 26-01-84 27-01-84 23-02-84 16-02-84 27-01-87
EP 470381 A	12-02-92	JP 4069323 A JP 6086371 B JP 4134014 A JP 7023289 B JP 4134015 A JP 6086368 B AT 132738 T DE 69116256 D DE 69116256 T US 5254333 A	04-03-92 02-11-94 07-05-92 15-03-95 07-05-92 02-11-94 15-01-96 22-02-96 23-05-96 19-10-93
GB 2134784 A	22-08-84	LU 84638 A BE 898853 A CA 1205748 A CH 659388 A DE 3404627 A FR 2540725 A JP 4030366 B JP 59172413 A NL 8400401 A SE 8400510 A US 4668508 A	08-11-84 07-08-84 10-06-86 30-01-87 16-08-84 17-08-84 21-05-92 29-09-84 03-09-84 11-08-84 26-05-87
GB 2136689 A	26-09-84	LU 84708 A	14-11-84

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 96/17519

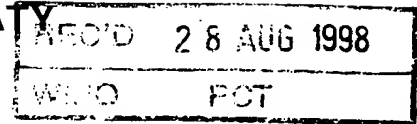
Patent document cited in search report	Publication date	Patent family member(s)	Publication date
GB 2136689 A		BE 899237 A	24-09-84
		CA 1205749 A	10-06-86
		CH 659389 A	30-01-87
		DE 3410842 A	27-09-84
		FR 2542997 A	28-09-84
		JP 1770093 C	30-06-93
		JP 4060082 B	25-09-92
		JP 59231008 A	25-12-84
		NL 8400929 A	16-10-84
		SE 8401602 A	24-09-84
		US 4591610 A	27-05-86

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)





Applicant's or agent's file reference JA171F/JH	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (PCT/IPEA/416)	
International application No. PCT/US96/17519	International filing date (day/month/year) 04/11/1996	Priority date (day/month/year) NONE
International Patent Classification (IPC) or national classification and IPC A61K7/06		
Applicant THE PROCTER & GAMBLE COMPANY et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
 - ☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand 28/05/1998	Date of completion of this report 26.08.98
Name and mailing address of the IPEA/  European Patent Office D-80298 Munich Tel. (+49-89) 2399-0. Tx: 523656 epmu d Fax: (+49-89) 2399-4465	Authorized officer Hedegaard, A Telephone No. (+49-89) 2399-8644 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US96/17519

I. Basis of the report

1. This report has been drawn on the basis of (*substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.*):

Description, pages:

1-23 as originally filed

Claims, No.:

1-3 as originally filed

2. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

4. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-3
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1-3
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1-3
	No:	Claims	

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US96/17519

2. Citations and explanations

see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. The subject-matter of claims 1-3 is considered novel (Art. 33(2) PCT) since there is no disclosure in the available prior art documents of a composition comprising an amphoteric polymer, an anionic polymer and a cationic polymer at levels and ratios as defined in present claim 1.
2. EP-A-0 685 219 and EP-A-0 470 381 disclose hair treatment compositions comprising at least one cationic, anionic and/or amphoteric polymer.

GB-A-2 123 694 and GB-A-2 134 784 disclose hair treatment compositions comprising either at least one cationic polymer and at least one anionic polymer or at least one of these polymers and an amphoteric polymer.

GB-A-2 136 689 discloses hair treatment compositions comprising either at least one cationic polymer and at least one anionic or amphoteric polymer or at least one anionic polymer and at least one cationic or amphoteric polymer and at least one xanthan gum.

There is no example in any of these documents of a composition comprising all three types of polymers; amphoteric polymer, anionic polymer and cationic polymer; at levels and ratios as defined in present claim 1. Furthermore, there is no hint that such compositions would provide flexible and good holding film texture, which cannot be achieved by single use of or combination of two of any of the above mentioned three types of polymers. Therefore, the subject-matter of claims 1-3 is considered to involve an inventive step (Art. 33(3) PCT).

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US96/17519

Item VIII

Certain observations on the international application

1. The word "about", particularly when applied to a range, detracts from the general clarity of the description and claims (Article 6 PCT).
2. It appears that the examples 2 (comprising 10.0% Yukaformer SM) and 4 (comprising 0.15% Celquat H100) on p. 22 of the description do not fall within the invention as defined by claim 1.

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WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: A61K 7/06	A1	(11) International Publication Number: WO 98/19653 (43) International Publication Date: 14 May 1998 (14.05.98)
(21) International Application Number: PCT/US96/17519 (22) International Filing Date: 4 November 1996 (04.11.96) <i>04 May 99/30 mos</i> (71) Applicant (for all designated States except US): THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US). (72) Inventor; and (75) Inventor/Applicant (for US only): NAMBU, Takanori [JP/JP]; 3-20-903, Morigo-cho 2-chome, Nada-ku, Kobe 657 (JP). (74) Agents: REED, T., David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217 (US).		(81) Designated States: BR, CN, JP, MX, US, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i>
(54) Title: HAIR STYLING COMPOSITION (57) Abstract <p>Disclosed are hair styling compositions comprising by weight: (a) from about 0.2 % to about 5 % of an anionic polymer; (b) from about 0.2 % to about 5 % of a cationic polymer; (c) from about 0.2 % to about 5 % of an amphoteric polymer; and (d) a solvent; wherein the total of components (a), (b), and (c) is from about 0.6 to about 15 %, and wherein the level of the component comprised at the lowest level among components (a), (b), and (c) is at least about 5 % of that of the component comprised at the highest level among components (a), (b), and (c).</p>		

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

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DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

INTERNATIONAL SEARCH REPORT

Int. Application No
PCT/US 96/17519

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 A61K7/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 A61K

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Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

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X	GB 2 134 784 A (L'OREAL) 22 August 1984 see claims 1,10,22 see page 7, line 45-54 ---	1,3
-/--		

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

30 July 1997

Date of mailing of the international search report

0 8. 08. 97

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Peeters, J

INTERNATIONAL SEARCH REPORT

Int. Application No
PCT/US 96/17519

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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X	GB 2 136 689 A (L'OREAL) 26 September 1984 see claims 1,3,11,14,16 -----	1,2

INTERNATIONAL SEARCH REPORT

Information on patent family members

Int. Application No

PCT/US 96/17519

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 685219 A	06-12-95	DE 4419457 A BR 9502645 A ES 2082735 T JP 7330557 A US 5609168 A	07-12-95 05-03-96 01-04-96 19-12-95 11-03-97
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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		CH 659389 A	30-01-87
		DE 3410842 A	27-09-84
		FR 2542997 A	28-09-84
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		JP 4060082 B	25-09-92
		JP 59231008 A	25-12-84
		NL 8400929 A	16-10-84
		SE 8401602 A	24-09-84
		US 4591610 A	27-05-86
